

LAPISOVA, N.P.; GOL'DSHTEYN, A.L.

Determination of hexaethyldilead in tetraethyllead. Zhur. anal. khim.
16 no. 4:508-509 J1-Ag '61. (MIRA 14:7)
(Lead)

GOL'DSHEYN, A.L.; LAPISOVA, N.P.; SHTIFMAN, L.M.

Determination of hexaethyldilead in ethyl fluid. *Laur. anal. khim.*
17 no.1:143-144 Ja-F '62. (MIRA 15:2)
(Lead--Analysis)

SOV/65-58-9-7/16
 Gol'dshteyn, A. I.; Stasinevich, D. S.; Petrova, Ye. N;
 Gladchenko, A. I.

AUTHORS:

Gl'adchenko, A. I.

TITLE:

Comparing the Effectiveness of Additives which Prevent
 the Sedimentation of Lead Deposits in Ethylated Petrols.
 (Sravneniye effektivnosti prisadok, predotvrashchayushchikh
 vypadeniye svintsovykh osadkov iz etilirovannykh benzinov)

PERIODICAL:

Khimiya i Tekhnologiya Topliv i Masel, 1958, No 9,
 pp 35 - 37, (USSR)

ABSTRACT:

Anti-oxidants such as 2,4,5-trialkylphenols and N-substi-
 tuted paraminophenols are used predominantly for this
 purpose; parahydroxydiphenylamine (N-phenylparaminophenol)
 (Ref 1 and 2) are used in the USSR and N-butylparamino-
 phenol and 2,6-di-tert.-4-methylphenol (BIF) in the USA
 and other Western countries. The authors compared the
 effectiveness of BIF and of parahydroxydiphenylamine as
 stabilisers preventing the sedimentation of lead deposits
 in ethylated aviation fuels. Their effect as inhibitors
 was also tested. Samples of the fuel were heated in
 sealed glass ampules over a water bath. The concentration
 of the stabiliser was so adjusted that its concentration
 in the fuel = 0.002, 0.004 and 0.006%. Data on the
 effectiveness of the investigated stabiliser in various

Card 1/2

30648

53700

S/CE1/61/000/020/073/089
B/66/B147

AUTHORS: Stasinevich, D. S., Gol'dshleger, A. L.

TITLE: Reaction of tetraethyl lead with hydrocarbon halides

PERIODICAL: Referativnyy zhurnal. Khimiya no. 20, 1961, 320, abstract
20134 (Tr. po khimii i khim. tekhnol. (Gor'kiy), no. 2, 1960,
209-213)

TEXT: It was established that $Pb(C_2H_5)_4$ reacts with $C_2H_4Br_2$, $C_2H_2Br_4$, and some other hydrocarbon halides, at $75^\circ C$ and an atomic ratio $Pb : halide = 1 : 2$. The ethyl radicals are replaced by halides and, subsequently, triethyl and diethyl lead dihalides are formed. A mechanism explaining the initiation of the process by the oxidation of $Pb(C_2H_5)_4$, and the further course of reaction according to a chain system was proposed.

33545

3/1/60/200/011/001/016
B013/B074

15801

STILKIN G. I., Iashcheva, A. L., Lapinsova, N. P., Jorina, N. P.

TITLE The Effect of Their etopid Lead on a Component of the Catalyst for the Pressure Sensitive Polyethylene

Received 1997-05-20; revised 1997-09-04; accepted 1997-10-01.

TEXT The work established the possibility of using tetraethyl lead for styrene polymerization. It was found that polystyrene can be obtained in the presence of a catalyst consisting of tetraethyl lead and titanium tetrachloride. Polymerization was conducted both at atmospheric pressure and in an autoclave at low pressure. The use of a certain pressure facilitated a more active course of the process, and increased the yield. The polystyrene was obtained with alcohol, with alcohol saturated with hydrochloric acid, and with a mixture of alcohol and aqueous solution of ammonium acetate. The result was a snow-white polymer containing no tetraethyl lead nor any other alkyl-containing lead compounds. The melting point of the resulting polystyrene is 166° - 172°C. The viscosity of a 1% solution

2004, 2005

88545

1. The following information is being provided
to the Director of the Laboratory of
Polymer Chemistry.

3/1 1/6/78-0/01/101/116
8013/E014

The following information is being provided to the Director of the Laboratory of Polymer Chemistry. The intrinsic viscosity of the polymer is between 0.825 and 2.0 depending on precipitation conditions. The molecular weight is 16,000 - 110,000. Further work is required to improve the precipitation conditions and the quality of the product.

ABRAMOVICH, A.D., kand. tekhn. nauk; ANTONA, M.P., kand. tekhn. nauk; KAPLEN, G.A., inzh.-ekonomist; LEVIT, A.A., inzh.-zemleustroitel'; LISTENGURT, P.M., kand. geogr. nauk; SAMOILOV, Ya.I., kand. tekhn. nauk; TROLYAN, I.M., kand. arkhitek.; SOLOV'YEV, L.A., kand. arkhitek.; STELICOV, V.I., kand. arkhitek.; FLEBYEV, V.G., inzh.; Irinimali uchastnye: BUTUNOVA, V.F.; GLABINA, N.K.; GOL'DSHTEYN, A.M.; DERYANOVSKIY, V.S.; KAPLAN, G.L.; FEDOTOVA, L.A.; TSEYTLIN, G.I.; MERLAKOV, N.Ye., red.; KOLMANENETS, Z.I., red. izd-va; GOLOVKINA, A.A., tekhn. red.

[Regional planning of economic administrative regions, industrial regions and centers; planning guide] Naionnaia planirovka ekonomicheskikh i administrativnykh raionov, promyshlennykh raionov i uslov; rukovodstvo po proektirovaniu. Pod red. N.I. Murlakova. Moskva, Gosstroizdat, 1968. 266 p.

(MIRA 15:10)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut gradostroitel'stva i raionnoi planirovki. 2. Zamestitel' direktora po nauchnoy rabote nauchno-issledovatel'skogo instituta gradostroitel'stva i rayonnoy planirovki (for Murlakov). 3. Nauchno-issledovatel'skiy institut gradostroitel'stva i rayonnoy planirovki (for Butunova, Glabina, Gol'dshcheyn, Deryanovskiy, Kaplan, Fedotova, Tseytlin).

(Regional planning)

RYAZANOV, V.S.; BUTKOVA, V.P.; SIMONOV, G.V.; GOLDSHTEIN, A.M.;
KORNEYEV, N.A.; POMOYLOV, Ya.M.; LYCYKH, I.V.;
KHEMEL'NITSKIY, G.S.; KRUTIKOV, Ye.B.; ANTONOV, M.F.;
DOBROSEL'SKAYA, T.M.

[Recommendations for the establishment of schemes for
planning farming areas] Rekomendatsii po sostavleniiu
skhem planirovki sel'skokhoziaistvennykh raionov. Moskva,
Stroiizdat, 1965. 151 p. (MIRA 18:7)

1. Moscow. Tsentral'nyy nauchno-issledovatel'skiy i
proyektnyy institut po gradostroitel'stvu. 2. Tsentral'-
nyy nauchno-issledovatel'skiy i proyektnyy institut po
gradostroitel'stvu, Moskva.

GOL'DSHTEYN, A.N.; ZAVERTKIN, R.A.

Corrosion of reinforced concrete structures under the action
of stray currents. Prom. stroi. 40 no.7:25-29 J1 '63.
(MIRA 16:10)

1. Vsesoyuznyy zaochnyy politekhnicheskii institut.

GOLDSHTEYN, A N

Effect of stray currents during electric welding on the strength of reinforced concrete elements, From: *Stray Currents*, 1981, Vol. 13, No. 1, p. 1-4.

GOL'DSHEYN, Abram Samoylovich; KIL'YENKO, Vladimir Ivanovich;
ZUBAKOVA, Ye.I., red. red.

[Suspended and arched passage of petroleum products] Vi-
siachie i arcochnye perekhody nefteprovodov. Moskva,
Nedra, 1967. 115 p. (MIRA 17:6)

GOLDSTEIN, A.S., inv.

Dry field joint of square reinforced concrete piler.
Transp. ctrl. 15 no. 11:50-51 N 165. (11:50:11)

KOTEL'NIKOV, V.N., kand.tekhn.nauk; CHENTSOVA, E.I., kand.tekhn.nauk;
 ZYBIN, Yu.P., doktor tekhn.nauk; KOCHETKOVA, T.S.; ZAKATOVA, N.D.,
 kand.tekhn.nauk; GUBAREV, A.S., kand.tekhn.nauk; SHVETSOVA, T.P.,
 inzh.; VOROB'YEVA, A.A., kand.tekhn.nauk; MIRSKIY, V.I., inzh.;
 NISNEVICH, Ye.A., kand.tekhn.nauk; GOL'DSHTEYN, A.V., inzh.;
 KALASHNIKOVA, T.A., inzh.; SHUSTOROVICH, M.L., kand.tekhn.nauk;
 MOREKHODOV, G.A., inzh.; ZAKHAROV, S.R., retsenzent; BLAGOVESTOV,
 B.K., retsenzent; STRONGINA, O.P., retsenzent; SHMIDT, M.I., re-
 tsenzent; ZUYEV, V.T., retsenzent; KOSAREV, M.I., retsenzent;
 STEPANOV, I.S., retsenzent; RAMM, S.N., retsenzent; PEVZNER, B.M.,
 retsenzent; VEYNBERG, I.A., retsenzent; TURBIN, A.S., retsenzent,
 SMIRNOVA, Ye.V., retsenzent; BUGOSLAVSKAYA, L.A., retsenzent;
 GAMOVA, A.S., retsenzent; KHANIN, N.M., retsenzent; MURVANIDZE,
 D.S., red.; PLEMYANNIKOV, M.N., red.; GRACHEVA, A.V., red.; MEDVEDEV,
 I.Ya., tekhn.red.

[Shoemaker's handbook] Spravochnik obuvshchika. Vol.1. Moskva,
 Gos.nauchno-tekhn.izd-vo lit-ry po legkoi promyshl. 1958. 540 p.
 (MIRA 12:4)

1.Gosudarstvennaya Ordena Lenina i Ordena Trudovogo Krasnogo Znameni
 obuvnaya fabrika "Skorokhod" imeni Ya.Kalinina (for Zakharov, Blago-
 vestov, Strongina, Shmidt, Zuyev, Kosarev, Stepanov, Ramm, Pevzner,
 Veynberg, Turbin, Smirnova, Bugoslavskaya, Gamova, Khanin).
 (Shoe manufacture)

KATONIN, V. KH.; GOLDSTEIN, A. Ya.; Engl.

Acetic Acid

Ways to economize on auxiliary chemicals in the production of esters of acetic acid and methanol. Dokl. Akad. Nauk SSSR, 1953, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

S. 1241/61/0003 303/000/011
81241-204

AUTHORS: Tendler V. M., Gel'fandeyn A. Ya.

TITLE: The vacuum impregnation of the glass filler and the forming of products from glass-reinforced plastic

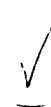
PERIODICAL: Plasticheskiye massy, no. 2, 1961, 59-61

TEXT: The present investigation had the purpose of obtaining initial data for working out the technology of the mechanized production of life boats, for which vacuum forming appears to be the most promising method. All experiments were carried out with the cold-hardened polyester maleate resin of the type EH-1 (PN-1); as initiator isopropylbenzene hydroperoxide (Giperiz) and as an accelerator cobalt naphthenate was used. The glass filler was impregnated in a special mold (Fig. 1), consisting of two plates of organic glass, which was pressed together by means of clamps and which were sealed by means of a rubber liner in a special groove. In the mold, a rarefaction of from 750 to 760 mm Hg may easily be attained and maintained. In the method of vacuum impregnation, the air is sucked

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The vacuum impregnation of the

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B24.5204



cut from a hermetically sealed mold containing the glass filler and the resin is pressed into the mold by the external air pressure. The principal factor of the technological procedure is the rate of impregnation and its dependence on various factors. For the impregnation time T , the relation $T = \eta H^2 / P$ holds, where η is the resistivity, μ - the dynamic viscosity coefficient of the resin, P - the pressure during impregnation, and H is the way taken by the impregnating agent. As determining the resistivity of the material is difficult, the impregnation time of an arbitrary product is calculated from the data obtained during impregnation, where $T = T_0 (H/H_0)$ with η, μ and $P = \text{const}$ (2), $T = T_0 (L/L_0)$ with H, η and $P = \text{const}$ (3), $T = T_0 (P_0/P)$ with H, η and $\mu = \text{const}$ (4) (T_0 denotes the impregnation time of the standard sample). For the vacuum impregnation process the same relations hold with satisfactory accuracy as for the filtration process. With an increase of pressure to 0.5 folds the impregnation time is shortened approximately in the same proportion, and if the way is doubled, the impregnation time rises to four times its

Card 1/3

The vacuum impregnation of the...

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3124/3204

amount (Fig. 2). The service life of resin decreases especially strongly with the temperature within the range of from 20 to 400°C (Fig. 3). The viscosity of resin does not change during about 90% of the service life of the resin (Fig. 4). The forming process is carried out either in a mold with fixed cavity and fixed punch (Fig. 5a), or in a mold with closed elastic punch (Fig. 5 b). The laboratory assistants K. G. Aristarkhov and O. A. Zharunov as well as the senior technician A. G. Ionis took part in the experiments. There are 6 figures and 1 table.

Card 3/8

GOL'DSHTEYN, A.Yu.

Electric fork lift truck. Biul.tekh.-ekon.inform. no.8:77-79 '61.
(MIRA 14:8)

(Fork lift trucks)

1961-1962, J. A. ...
... ..
... ..

Foreign
... ..
... ..

GOL'DSHTEYN, B., inzh.

Pneumatic vibrators. Na stroi. Nos. 3 no.10:2 of cover 0 '62.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut stroitel'nogo i dorozhnogo mashinostroyeniya.
(Vibrators)

GOL'DSHTEYN, B., inzhener.

Building Moscow refrigeration plant of precast reinforced concrete.
Stroitel' 2 no.9:6-7 S '56. (MLRA 10:1)
(Moscow Refrigeration and refrigerating machinery)
(Precast concrete construction)

GOL'DSHTEYN, B.A., kandidat tekhnicheskikh nauk [deceased]

Calculating light intensity of fixtures installed at an inclined angle. Svetotekhnika 1 no.3:21-24 Je'55. (MIRA 8:10)

1. Khar'kovskoye otdeleniye Gosudarstvennogo politekhnicheskogo instituta "Tyazhpromoelektroproyekt"
(Electric lighting)

SECRET

CONFIDENTIAL, L.P.

In the event of designation as a primary security violator, subject
shall be subject to the provisions of the law.
[illegible]

GOL'DSHEYN, B.G., inzh.

Increasing the life of vibration tips of recorders with vibration.
Strel. i dor. mashinostr. 3 no.9:25-26 S 1981. (Mir 11:10)
(Vibrators)

18.7100
18.1110

67415

30V/123-59-12-46680

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 12, p 108 (USSR)

AUTHORS: Gol'dskhteyn, B.G., Vinogradov, A.I.

TITLE: The Hardening of Carbon Steel Tools in Molten Salts

PERIODICAL: Yaroslavsk. prom-st' (Sovnarkhoz Yaroslavsk. ekon. adm. r-na), 1958, Nr 6, pp 15-18; Stroit. i dor. mashinost., 1958, Nr 11, pp 34-36

ABSTRACT: In order to reduce residual stresses and to obtain high mechanical properties in tools of carbon steel, it is recommended to apply a staggered cycle of treatment with cooling in molten salts at 110 - 125°C, soaking for 1 - 5 minutes and cooling in the air. The composition of the mixture is: 53% KNO₃, 40% NaNO₂, 7% NaNO₃ with an addition of 2 - 3.5% of water; the melting point is 100°C. Provided that intensive agitation is taking place, a hardness of Rc 60 is obtained for tools of carbon steel with a thickness up to 60 - 80 mm. If the machine parts to be hardened, made of U8 and U10 grade steel, are vigorously moved, a hardness of Rc 62 - 64 can be obtained. Staggered hardening, owing to a decrease in residual stresses, ensures a minimum of deformation of the tool and practically completely eliminates the risk of hardening cracks. Since cooling in molten salts at

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4

The Hardening of Carbon Steel Tools in Molten Salts

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a temperature of 110 - 125°C reduces the thickness of the hardened layer, compared with cooling in water, it is expedient to increase the heating temperature of hardening up to 820 - 840°C. A decrease in deformation at tooling of complicated shape can be obtained by subjecting the blanks to intermediate heat treatment. Staggered heat treatment can be efficiently employed for the hardening of cemented machine parts from low carbon steel up to 80 mm in thickness, as well as of hardened and low parts from SKH2 and other steel grades, if hardening in oil does not ensure high hardness.

B. V. N.

4

Card 2/2

GOL'DSRTEYN, B.G.

Increasing the durability of tools. Stan.i instr. 29 no.11:39
N '58. (MIRA 11:11)

(Dies (Metalworking))

(Metal-cutting tools)

123

187100

SOV/137-59-5-11407

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, No 3, p 275 (USSR).

AUTHORS: Gol'dshteyn, B.G., Vinogradov, A.I.

TITLE: Quench-Hardening of Carbon-Steel Instruments in Molten Salts

PERIODICAL: Yaroslavl. prom-sti (Sovnarkhoz Yaroslavl. ekon. adm. r-nal. 1958, Nr 6, pp 15 - 18)

ABSTRACT: Information is given on experience made at the "Krasnyy mayak" plant in using stepwise quench hardening of instruments made of U8 and U10 or carburized steel in a salt bath of the following composition (in %): 53 KNO₃, 40 NaNO₂, 7 NaNO, with addition of 2 - 3.5% water. The low operational temperature of the salt bath (110° - 125°C), vigorous stirring with an impeller, and the presence of water raise considerably the cooling rate in comparison to a salt bath having a temperature of 150° - 160°C, and ensure 52 - 64 in quench-hardening U8 and U10 steel instruments of up to 60 - 100 mm in diameter or thickness. The salt bath with a salt weight of 120 - 150 kg is filled up with 0.2 1/day of water in two shift operations. To raise heterogeneity of in-

Card 1/2

807/137-0-5-11407

Quench-Hardening of Carbon-Steel Instruments in Molten Salts

Instruments of large cross-sections it is recommended to raise the hardening temperature to 820° - 840°. Impaired mechanical properties caused by coarse structure of the grains are compensated by reduced internal stresses and a higher amount of residual austenite. Compared to water quenching and quench-hardening in salt and alkali solutions, the method is simple and does not require settling of holes in the instruments. It eliminates rejects caused by cracks and warping. Extended holding in the salt bath over 1 - 5 minutes has only a slight influence on the structure and hardness of steel.

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GOL'DSHTEYN, B.G., inzh.

Hardening in fused slats at 110 - 125°. Metalloved.
i term. obr. met. no. 11:62-64 N '62. (MIRA 15:11)
(Steel--Hardening)

GOL'DSHTEYN, B.G., inzh.

Increasing the service life of deep vibrators. Stroi. i dor.mash.
9 no.10:12-14 0 '64.
(MIRA 18:1)

PLATONTEIN, Boris Grigor'evich; KASITSYNA, K.N., Inst., ind.

[Pneumatic planetary vibrators] Pnevmaticheskie planetyarnyye vibratory. Moskva, Stroizdat, 1964. 21 p.
(GMA 14:7)

1. Zamertitel' nachal'nika otdela vyrazhatsya i 3-4
khar'khi mashin. Vsesoyuznogo nauchno-issledovatel'skogo
instituta stroitel'nogo i dorozhnogo mashinostroyeniya
(for Gel'dshteyn).

AGENCY: Gos'Gidtekn, S.S.S.R.

TITLE: Some Experience in the Operation of a Plant for the Recarbonisation of Recirculating Cooling Water

PERIODICAL: Izvestiya, 1981, No 7, pp 40 - 41 (USSR)

ABSTRACT: In order to prevent precipitation of CaCO₃ in cooling equipment which requires stoppage every three months for cleaning, recarbonisation of the recirculating cooling water was adopted in the by-product plant of the Yenakiyevo Coking Works. The carbonisation is done by three parallel water ejectors which draw the water from the coke oven main line (gas signal). It was found that the operation of the ejectors was sufficient to obtain a degree of saturation of water with carbon dioxide of 14 - 20 ml/litre. The amount of water supplied to the ejector was 22 - 24 m³/hr under pressure of 30 - 40 kg/cm²; the amount of water drawn in 10 - 15 m³/hr containing 12 - 14% of carbon dioxide. During the recarbonisation of water in the rectification plant, the amount of water in the rectification plant was reduced, cleaning of the equipment was carried out with less frequency.

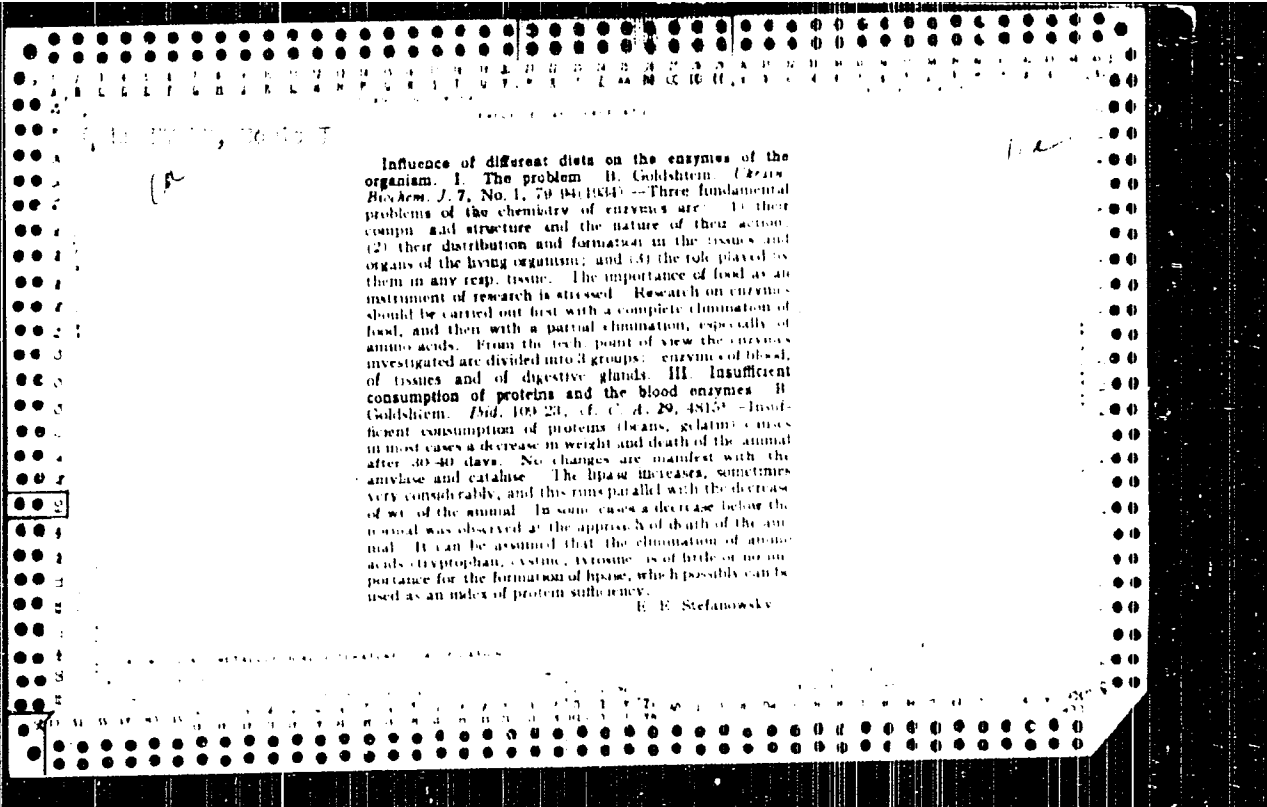
Card 1/2

Some experience in the operation of a plant for the recombination
of residual and cooling water

The precipitate layer on the walls of the water (inner 1
diameter 10 mm) was 1 - 1.5 mm thick. The solid precipitate
of the water. The precipitate layer of the water was
after the introduction of air. Water the same indicated
that the solid precipitation of the water practically
disappeared (0.2 - 0.3 mm) and the solid precipitate of the
water consistency was 10 - 15 g/l. The water was
about 1.5 g/l and 1.5 g/l.

Associated: (Technically Recombined Water) (Yenakiyev
Spring Water)

June 2/2



GOLDSHTEIN, Boris I

118

Influence of different diets on the enzymes of the organism. II. Starvation and blood enzymes. B. Goldshteyn and K. I. Karkova. *Trudy. Biochem. J.* 7, No. 1, 95-107 (1934); cf. C. A. 20, 4784. - The blood catalase of rabbits shows no typical variations during starvation, the total quantity diminishing somewhat as a result of anemia. The amylase increases slightly during the first few days and falls in some cases afterwards. The lipase decreases progressively and considerably. No correlation could be established between the lipase and the decomposition of albumin in the organism. B. E. S.

ASAC 51.4 METALLURGICAL LITERATURE CLASSIFICATION

GOLDSTEYN, Boris I																									
PRACTICES AND PROPERTIES INDEX																									
<p>Influence of different diets on the enzymes of the organism. IV. Fasting and the enzymes of the tissues. B. Goldshteyn and K. I. Kutkova. <i>Ukrain. Biochem. Zhur.</i> 7, No. 2, 91 (1963). Cf. C. A. 29, 4784. In starving rabbits there is no alteration in the lipase (L) of liver, kidney and lung. The wt. of the liver decreases rapidly, owing to a decrease in the total quantity of tissue, and this simultaneously produces a decrease in the blood I. The amylase of the liver is not affected. V. Protein-free food and the enzymes of blood and tissues. B. Goldshteyn, R. R. Sigalova and V. D. Melnichenko. <i>Ibid.</i> 1963, 29. Rabbits fed on a protein-free diet live 1.5-2 months. There is no alteration in the amylase of the blood and liver, or in the I of the lung. There is a very small increase of I in the liver, and a marked increase in the kidney. Sometimes there is an increase of I in the blood. B. C. A.</p>																									
<p>ASH S.L.A. METALLURGICAL LITERATURE CLASSIFICATION</p>																									

GOLDSHTEYN, Boris I		PROCESSES AND PROPERTIES INDEX	
<p>Proteinases (cathepsin) in the tissues of the infantile organism with dysentery and toxic dyspepsia. B. Goldshteyn and M. Ginzburg. <i>Ukrain. Biochem. Zhur.</i> 7, No. 3-4, 147-50 (1935). The cathepsin per g. of dry matter is less than normal in glycerol exts. of liver, kidney and spleen of children who have died of toxic dyspepsia. B. C. A.</p>		<p>11/2</p>	
<p>ASH & LA METALLURGICAL LITERATURE CLASSIFICATION</p>		<p>11/2</p>	

GOLDSHTEYN, Boris I

Cathepsin of tissues B. Goldshtein, I. Kras
Biochem. Zhur. N. 1, 87, 194, 1963. H₂O₂ used as
activator for cathepsin, sometimes restricts its activity.
A weak activation or inhibition but not a strong inhibition.
It is converted into a strong activation by dilution H₂O₂.

03C

PROCESSING AND PROPERTIES INDEX

2-4

1. **Alkaline phosphatases in organs of animals in different stages of phylogenetic evolution.** B. GOLDBERG and E. J. MIZGALSKI (Ukrain. Biochem. J. 1935, 8, No. 1, 103--133).--As regards concn. of cathepsin (I), the organs form the series: kidney > liver > spleen > muscle; and the animals the series: rat, frog, pigeon > dog, cat, hen, rabbit, guinea-pig > cow. The concn. of (I) is possibly related to the intensity of the metabolism, which decreases as body wt. increases. With mammals kidney (I) is strongly activated, but liver (I) is slightly inhibited or slightly activated by H_2S . With amphibia, H_2S has no action or restricts slightly the activity of liver (I), but activates kidney (I) slightly. With birds H_2S strongly restricts the activity of kidney (I) and slightly that of liver (I). The different actions of H_2S on kidney extracts are possibly due to the different end-products of protein metabolism with mammals and birds. With mammals H_2S activates spleen (I); with frogs it greatly restricts its activity.

E. P.

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION

SECTION DIVISION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

GOLDSHTEYN, Boris I

Cathepsin in the embryo and in maternal tissues. I
B. Goldshteyn and K. I. Migram. *Trav. Rus. kem.*
Zool. 8, No. 1, 130-135 (1965). The difference between the
units of activated (I) and nonactivated (II) cathepsin
increases in the maternal organs during (and possibly
parallel with) the growth of the embryo. In the placenta
the value of II is very low; the difference between the
units of I and II is very great in rat, less in rabbit and
guinea pig and very low in human placenta. The content
of I and II in the embryo is low and increases with the
growth. After birth the content increases, being greater
than in the corresponding maternal organs. After reach-
ing a max. it falls to the normal value. The difference
between the units of I and II increases rapidly. Thus the
protein metabolism of the embryo is controlled by the
maternal organs and by the placenta. The difference
between the units of I and II increases parallel with the
synthetic action.

B. C. A.

GOLDSHTEYN, Boris I

Tissue proteases (cathepsin) in protein deficiency.
Boris Goldshtein and M. Ginstsburg. *Ukrain. Biochem. Zhur.* 9, 341-8 (in Russian 348-55, in German 353-4) (1930); cf. *C. A.* 10, 5342; cf. *Ukrain. Biochem. Zhur.* VII, No. 1 (1932); VIII, No. 3; VII, No. 3 (1934).—The concn. of cathepsin in rabbit liver and kidneys is higher than normal in protein deficiency. The difference between cathepsin unactivated and activated with H₂S also is much increased, especially in the liver. It is concluded that when protein synthesis predominates over hydrolysis, a considerable activating action of SH groups of the cathepsin taken place, and, that when hydrolysis predominates, there is a depressing action. Protein synthesis in rabbit liver is obviously increased on a deficient protein diet.

B. P. Stefanovsky

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GOLDSHTEYN, Boris I

Proteinases (cathepsin) in tissues of the hen embryo
B. Goldshteyn and M. Gintsburg. *Ukrain. Biochem.
Zhur.* 9, 503-8 (in Russian 500-601, in German 602-193-01)
-The catheptic action of glycerol exts. from embryonal
membranes on gelatin becomes evident on the 9th day of
incubation. Highest values of the proteolytic action are
attained speedily and are maintained at about the same
level until the last days of incubation. The difference of
unactivated cathepsin and that activated by H₂S in the
exts. investigated is great, especially in the first days of its
appearance. The cathepsin values and the character of
the activating action of H₂S are similar to those observed
with placenta cathepsin R. E. Stefanowsky

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GOLDSHTEYN, Boris I

The problem of specificity of tissue proteinase cathepsin. H. Goldstein and E. Yu. Mdelman, *Izv. Akad. Nauk SSSR Ser. Biol.* 10, 267-82 in Russian (1962), in German 2840 (1962). The cathepsin of kidney, liver and muscles hydrolyzes the albuminous matter of its own organs much more than gelatin. The intensities of gelatin hydrolysis by cathepsins of different organs are different, the cathepsin of the liver and kidneys hydrolyzes not only albumin of the same organs, but also gelatin and that of muscle hydrolyzes only brown albumin and has almost no effect on gelatin. These results are closely connected with the specificity of different organ cathepsins, which is more distinct in the muscle cathepsin than that of the liver and kidneys. E. I. Shtanovskaya.

1. *St. Lawrence*

GOLDSHTEYN, Boris I

Ca

11 F

Glutathione and its state in normal and tumor bearing tissues of animals. Boris Goldshstein and M. I. Kolesnikovs. *Ukrain. Biokhem. Zh.* 10, 471-480, 1964 (in Russian 497, 500), 516-520, in English 521, 1964. The glutathione content in rat tissues, computed for dry matter decreases in the order: kidney, peripheral tissue of liver, rat sarcoma, liver, spleen. In some cases, the content in the liver of rats bearing the sarcoma was lower than in the liver of normal rats. The content of the fresh material, thus, however, was not the same for dry substance. Sometimes even the reverse was found. This fact depends on the degree of the dry residue in the liver of sarcomatous rats. A relatively slow oxidation of glutathione was shown by the sarcomatous tissue and spleen under aeration; the oxidation going only to a small limit and then ceasing. The total glutathione content decreased very slowly, contrary to the liver tissue. Practically no decrease could be discovered after 18 hrs. of aeration. Its oxidation and destruction in the liver of sarcomatous rats is more rapid than in that of normal animals. Its content and state seem to be considerably affected by the season; a more rapid oxidation taking place in winter than in summer. The rate of growth of

ASB S.C.A. METALLURGICAL LITERATURE CLASSIFICATION

GOLDSSTEIN, Boris I		A-4	
<p>Ascorbic acid in tissues of normal and tumour-bearing animals. B. GOLDSSTEIN and D. VOLKHEIM (Ukrain. Biochem. J., 1937, 10, 551-558).-- The amounts of ascorbic acid in the dried tissues of the rat are in the descending order healthy peripheral tissue of Jensen's sarcoma, spleen, liver, kidney. The amount of ascorbic acid in the spleen of sarcoma-bearing rats is greater than that of normal animals. With aeration of normal liver, decrease in the amount of reduced ascorbic acid begins after 3-4 hr., whilst oxidation in the kidney takes place more quickly. In the spleen, decrease in the reduced form occurs only after 18 hr. aeration. In healthy tissue of Jensen rat sarcoma, decrease in ascorbic acid is rapid after 2-3 hr. aeration, but soon ceases. Oxidation of ascorbic acid in liver of sarcoma-bearing rats begins earlier and is more rapid than in liver of normal rats. The season influences the concn. and state of ascorbic acid in normal and sarcomatous tissue, the amount in winter being much greater than that in summer. A mechanism probably exists in the animal to keep glutathione and ascorbic acid in the reduced states and protect them from oxidation, whilst glutathione helps to stabilize reduced ascorbic acid. J. N. A.</p>			
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GOLDSHTEYN, Boris I.		Cathepsin in the tissues of the embryo and mother	
C. d.		II Boris Goldshteyn and M. Gintsburg. <i>Biochem. J. (Ukraine)</i> 10, 617-689 in Russian 658-61, in English (1961 2) 1037. H ₂ S has no activating effect on freshly prep. liver cathepsin exts. of normal and pregnant rabbits. After the exts. from a pregnant rabbit have been kept in a refrigerator for several days, a considerable activating effect of H ₂ S on the cathepsin is noted. In exts. of a normal animal this effect appears not at all or considerably later and to a smaller degree. Reduced glutathione disappears from the liver exts. of the pregnant animal more rapidly than from those of a normal female rabbit. However, the activating effect of H ₂ S on cathepsin appears later than the disappearance of the glutathione. Therefore it is assumed that this disappearance does not play the leading part in the activation of cathepsin in exts. The cathepsin concn. in the extracts is higher in the pregnant than in the normal animal. L. I. Shtanovskiy.	
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<p>Biochemistry of tissue proteinases. B. I. GOLDSTEIN (Inst Biochem Ukrain Acad Sci, 1938, 202 pp.). The monograph deals with the nature, mode of action, and regulation of the activity of tissue proteinases. In particular, the influence of physiological factors, such as age, nutrition, and pregnancy, on the cathepsin activity of various tissues is described. The activity and specificity of cathepsins from animals belonging to different levels of the phylogenetic scale are compared. R. T.</p>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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GOLDSHTEYN, Boris I

Specificity of tissue proteinases (cathepsins). *Bogol.*
Goldshteyn, *Enzymologia* 2, 193-202 (1960), (U.S.S.R.)
31, 7155. The cathepsin of liver, kidney or muscle of
various animals has a greater proteolytic action on the
proteins of the parent tissue than on gelatin. The
specificity of a cathepsin with gelatin, caseinogen or oval-
bumin as substrate generally decreases as the animal yield-
ing the enzyme descends the evolutionary series, is influ-
enced by change in physiological condition, e.g., pregnancy
of the animal and is partly dependent on a thermostable
co-factant (colloidal carrier). (U.S.S.R.)

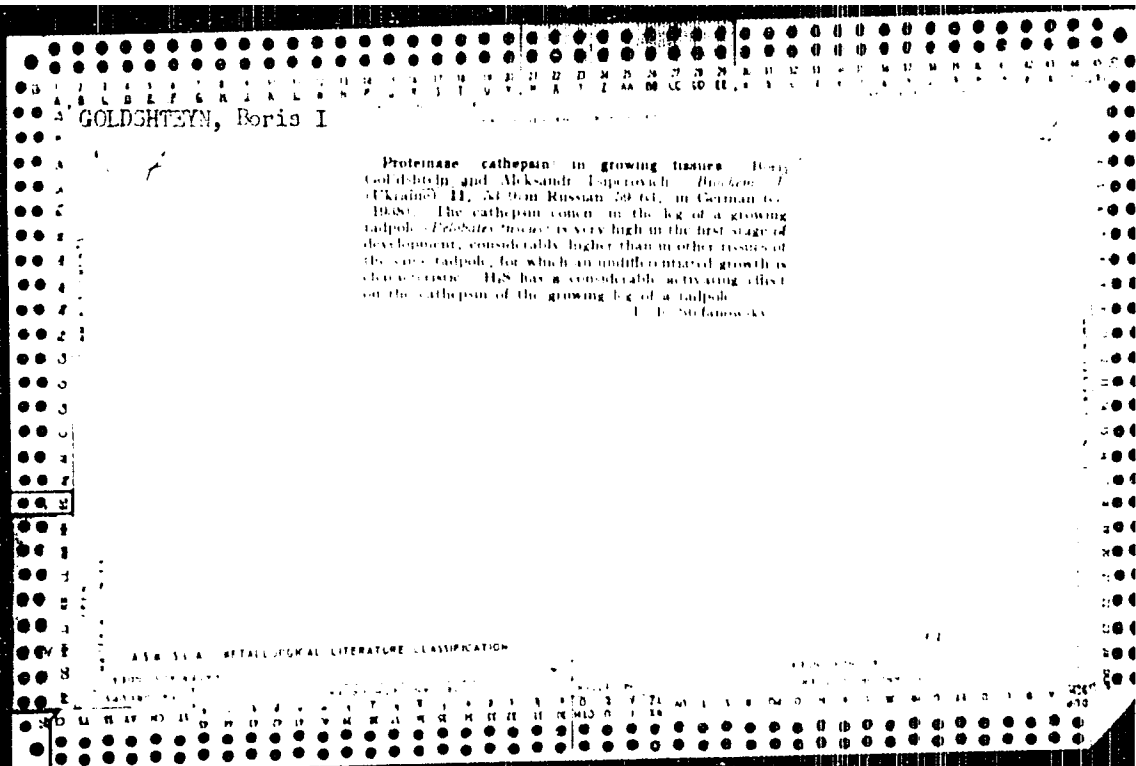
U.S.S.R. METAL-POPULAR LITERATURE CLASSIFICATION

GOUDRETT, E.I.

Oxidation of ascorbic acid in normal living tissue and the tissue of malignant tumors. E.I. GOUDRETT AND D.V. VOLKINSON (LEONH. LAB., DEPT. OF EXPERIMENTAL MEDICINE AND BIOLOGY, RIKI ROENTGEN-RADIOLOGICAL INSTITUTE) vol.3, no.2, p.355, 1936.

GOLDSHTIEN, P.I.

The effect of heavy metals on the oxidation of ascorbic acid
in the normal animal tissues and in the tissues of malignant tumors.
P.I. GOLDSHTIEN AND V. VOL'KINSON. (BIOCHEMICAL LABORATORY, DEPT OF EXPERIMENTAL
MEDICINE AND BIOLOGY, INST. OF ROENTGENOLOGY AND RADIOLOGY, KIEV) vol.3, no.4,
p.466, 1938.



GOLDSHTEYN, Boris I

Proteins (cathepsin) in tissues of a chick embryo
H. Boris Goldshtein and M. Gintzburg. *Russkaya i
Ukrainskaya khimiya* 11, 65-70 (1954). Russian 70, in German 11
(1958), cf. C. A. 31, 3127, 3972. During the develop-
ment of the embryo cathepsin forms in the yolk sack,
it is evidently absent from the yolk, the amnion and
the allantoic fluids. The cathepsin of the embryonic
membrane of an egg has a great hydrolytic effect on the
yolk and specifically toward albumin and globulin in
the white of the egg, whereas the cathepsin of the organs
of mammals has no hydrolytic effect on these compounds.
L. I. Stetsko.

ASA YCA METALLURGICAL LITERATURE CLASSIFICATION

BC

Specificity of tissue proteinases (cathepsins).
B. GOLDSMAN, M. GINSBURG, and E. MILGRAM
(Ukrain. Biochem. J., 1968, 11, 337-350).—Slakin,
dog, rabbit, and pigeon liver cathepsins do not
hydrolyze ovalbumin; addition of which to the ex-
tracts prevents autolysis of the homologous tissue-
proteinase, as a result of formation of stable ovalbumin-
cathepsin complexes. The rate of production of NH_4
acids in rat, horse, and chicken liver extracts is un-
affected by addition of ovalbumin, showing that these
cathepsins have a feeble action on this substrate.
The rate of NH_4 -acid production from ovalbumin
rises in the series: carp < ham < *Carassius auratus*
< *C. mores* < eel < frog < adder < crayfish <
skate < axolotl < chick embryo yolk sac cathepsins.
It is concluded that the higher is a given genus in the
evolutionary scale, the greater is the specificity of its
tissue proteinases. Physiological changes in the
animal affect the specificity of cathepsins; thus liver
cathepsin from pregnant rabbits hydrolyzes oval-
bumin. The same property is conferred on ordinary
rabbit liver cathepsin by addition of heat-inactivated
yolk sac cathepsin. R. T.

ASH, S. A. METALLURGICAL LITERATURE CLASSIFICATION

GOLDSHTEYN, Boris I

The relation between ascorbic acid and liver lipase.
Boris I. Goldshteyn and S. P. Bondareva. *Biochem.*
(Ukraine) 12, 91-93 in Russian, 1947, in English,
105-91 (1948). The prepn used was a suspension of rat
liver in phosphate buffer. The lipolytic activity was
followed after varying periods 2, 4, 6 and 8 hrs. of aera-
tion. A considerable decrease in the reduced form of
ascorbic acid was obtained, but only a comparatively
insignificant and inconsistent decrease in lipolytic ac-
tivity. When the expt. was repeated in the presence of
active ascorbic acid oxidase (cabbage juice), the reduction
in lipolytic activity was great and consistent. Ascorbic
acid was almost completely oxidized. Conclusion:
There is a relation between reduced ascorbic acid and liver
lipase, although this relation is not as yet clear. R. L.

ASR-31A METALLURGICAL LITERATURE CLASSIFICATION

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147000 0101

GOLDSHTEIN, Boris I.

Liver lipase and fat in growing organisms. *Review*.
Goldshtein and P. S. Flyashkevich. *Tr. Vsesoyuzn. nauchn. konf. zhivotnovodstva* 12, 279-280 in Russian, 280-9, in English.
1968. In rabbit, the fat content of the liver
varies inversely with its lipase activity, the general trend
being for the former to fall and the latter to rise
with increasing age. Abdominal changes are noted on the
2nd and 18-20th days of extrauterine life. B. C. P. A.

ANNUAL BIBLIOGRAPHICAL LITERATURE CLASSIFICATION

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GOLDSHTEYN, Boris I

Cathepsin and glutathione in the liver of normal rabbits and in hyperthyroidism. Boris Gol'dshteyn, M. Gintsburg, and G. Sheves. *Biochem. J.* (Ukraine) 12, 385-401 in Russian, 401-6; in English, 407-11 (1968).-- The cathepsin activity of exs, of the liver of rabbits fed with thyroid gland is greater than in normal rabbits. H_2S lowers the activity of fresh exs., to a greater extent in the former than in the latter group. The activity of the exs. falls with time, and such exs. are then activated by H_2S , to a greater extent in thyroid-fed animals; this effect is not paralleled by disappearance of reduced glutathione from the exs. The presence of activators of cathepsin other than glutathione is postulated. B. C. P. A.

ASB 35.4 METALLURGICAL LITERATURE CLASSIFICATION

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LIST AND NO. ORDERS		PROCESSES AND PROPERTIES NOTES	
GOLDSHTEYN, Boris I.		16	
<p>A study of the possibility of applying animal exvians for saccharification of grain-potato mashers. Boris I. Goldshteyn, Mark G. Goldenberg and Olga S. Sklyarskiy. <i>Russchem. J. Ukrainer</i> 12, 553 (1948). Russian, 1948. In English, 589 (1948). It was found that by using 4% malt and a 0.01% prepn. from swine pancreas, the alc. output was almost the same as if 8% malt were used. The authors recommend the use of this pancreatic extract to save the expenditure of malt. The cost of alc. production would be thereby considerably reduced. R. Levine</p>			
<p>ASH-51A METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>SEARCHED INDEXED SERIALIZED FILED</p>			

GOLDSHTEYN, Boris I.

Mechanism of ascorbic acid oxidation in animal tissues
B. I. Goldshteyn and D. V. Volynskiy. *Bulletin of the Academy of Sciences of the USSR, Division of Chemical Sciences, Series: Chemistry of Natural Compounds*, 1977, 25, 1377-1381. Ascorbic acid is oxidized in tissues at various rates, but not in liver, kidney, or placenta, during oxidation and on the presence of peroxidase and hydroxylase. Addition of H₂O₂ to peroxidase leads to the formation of a complex and the reaction is inhibited. Oxidation of ascorbic acid in the action with ascorbic acid, in the presence of both H₂O₂ and peroxidase are added. Ascorbic acid in liver and kidney tissue is not oxidized by H₂O₂ and peroxidase. H. P. Prusheva

Beckman, J. H. Dept. of Experimental Chemistry, University of California, San Diego, La Jolla, California 92037

ASA 55.6 METALLURGICAL LITERATURE CLASSIFICATION

GOLDSHTEYN, Boris I.

Method for the determination of the glutathione content of tissues. B. I. Goldshteyn, M. I. Koshchakov and P. G. Knyshenko. *J. Biochem. Ukraine*, 13, 119-27, in Russian, 128-32, in English, 1976. It was shown that in certain tissues (liver, spleen) heating at 52-55° for 30 min., after protein precipitation, led to the complete oxidation of the ascorbic acid present. This was due to a reaction involving the presence of ferric iron. To other tissues iron had to be added in order to oxidize the ascorbic acid by this method. The glutathione, not oxidized by this procedure, was determined by the titration before and after oxidation of the ascorbic acid.

GOLDHSTEYN, Boris I.

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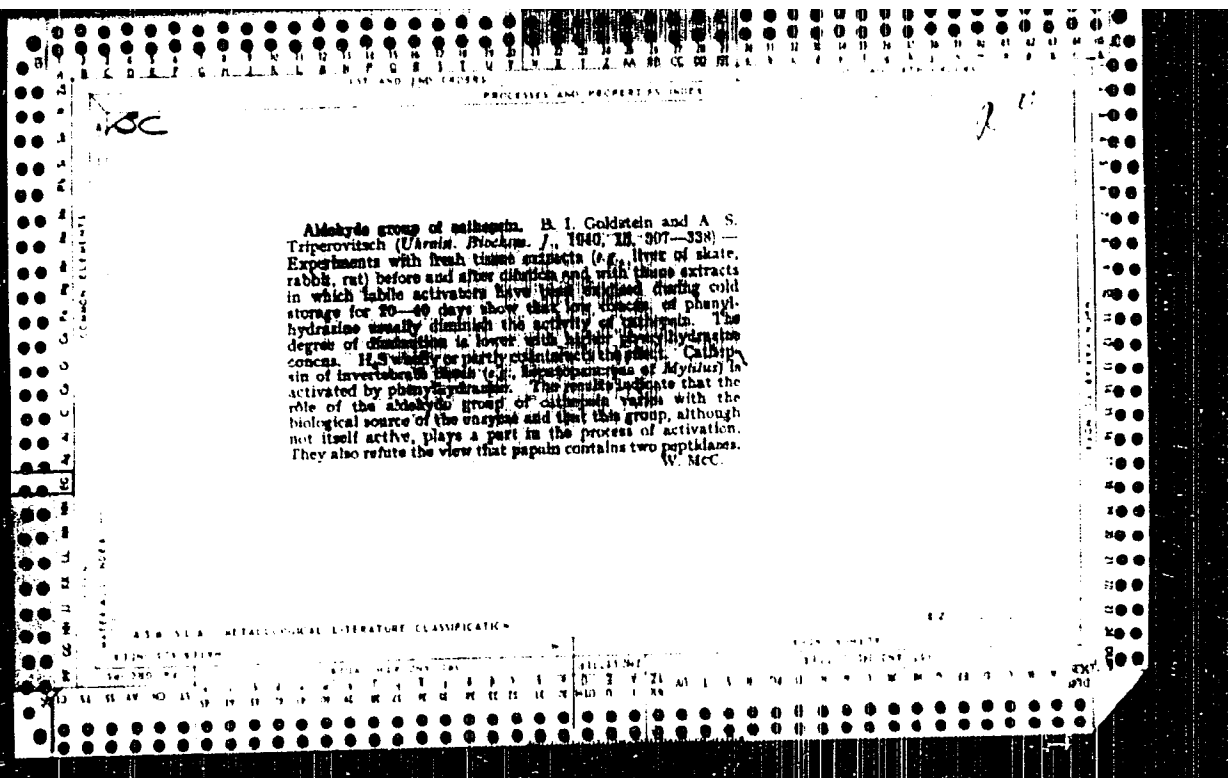
Comparison of the lipolytic activity of sulfate and acetone preparations of rabbit liver. B. I. Goldshteyn and E. S. El'vashkevich. *Biochem. J.* (Ukraine) **13**, 539-47, in Russian, 567-71; in English, 571-4; (1930). In connection with the work on the relation between the liver lipase and fat in growing rabbits (C. I. JJ, 7850⁸), J. Needham's method employed with his work on organoids (C. I. 28, 2418⁸) was decided upon to dehydrate the tissue without removing the fat. The liver, washed in physiologic soln. and dried with filter paper, was minced with scissors and mixed with 3 times its wt. Na_2SO_4 and placed over CaCl_2 . From 2 to 4 g. of fresh liver equiv. was taken for each expt. The conditions of synthesis varied for different expts., but were the same for acetone-ether (I) and sulfate (II) preps. Controls to det. the possible activating sulfate influence showed no such influence. The synthesis ratio of I to II is 1 to 2.3-5.5 for rabbits 12-45 days old, approaching that of adults. No coeff. could be derived for newborn to 1-2-day-old animals, whose fat-rich liver gave zero synthesis and hydrolysis value for I, but remarkably high II, 0.3-1.4%. The hydrolytic lipase activity of II of young animals equals that of fresh tissue. B. Gutoff

GOLDSHTEYN, Boris I.

Effect of iron on oxidation of ascorbic acid in animal tissue. In: *Iron in metabolism and in disease*. Ed. by A. V. Vukobratovic. New York, 1964. 1 p. Ascorbic acid oxidation in normal liver depends on a system containing Fe²⁺ and involving autoxidation of Fe complex. Oxidation is limited by the Fe content and by a second component of the complex. This oxidation is reversible, unlike that in growing tissues or tumors. Tumor growth might be inhibited by substituting a reducible Fe complex, e.g., pyridoxaldehyde, for the mechanism normally controlling ascorbic acid oxidation in the tumor.

BIOCHEMICAL LABORATORY, DEPT., OF EXPERIMENTAL MEDICINE AND BIOLOGY,
INSTITUTE OF ROENTGENOLOGY AND RADIOLOGY, KIEV

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



LIST AND INDEX ORDERS		PROCESSES AND PROPERTIES INDEX	
GOLDSHTEYN, Boris I.		Interrelationships between glutathione and ascorbic acid in animal tissues. B. I. Goldshtein and S. A. Kachorova. <i>Russkaya Khimiya</i> 16, No. 1, 24 (1949). Russian, 45 G; in English, 50 (1949). Adding Fe ²⁺ to the tissue without aeration has no immediate effect on the glutathione (I) or ascorbic acid (II). Fe ²⁺ causes an instantaneous and abrupt oxidation of II, and the no. of Fe ions required is several times the theoretical. It is oxidized only after the complete oxidation of II. Na ₂ PO ₄ and Na ₂ CO ₃ inhibit II oxidation in aeration, and in the presence of Fe. The action is connected with the formation of complex compds. of P with the mineral. "masked" Fe.	
ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION		FEDERAL BUREAU OF INVESTIGATION	
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ALPHABETIC INDEX																									
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GOLDSHTEYN, Boris I.																									
MECHANISM OF ASCORBIC ACID OXIDATION IN THE TISSUES OF THE ANIMAL ORGANISM IN AN ACID MEDIUM. B. I. Goldshstein and P. G. Kuzhenko. <i>Russkaya J. (Ukrainian)</i> 10, No. 1, 67 (1940). Russian, 40 (40). In English, 30 (1940).																									
The ascorbic acid (I) of liver and spleen tissues of rat is completely oxidized in warm 2% sulfosalicylic acid soln. (II) in 0.5 hr., in the spring and summer months; its rate of oxidation is much slower in exts. of kidneys and malignant neoplasm of rat sarcoma (III), resp., it is also slower during the fall and winter months. Warming II ext. of III in the presence of a similar ext. of liver speeds up the oxidation. Addn. of Fe ²⁺ , 0.02-0.1 mg./g. of tissue causes complete oxidation of all the tissue exts. on warming. A similar, but less energetic effect is produced by Cu ²⁺ . In II and in CCl ₃ COOH Fe is more active than I of lemon juice, in citric acid and HCl Cu is more active, at pH = 1 Fe is more active, at pH = 5.5, Cu. References.																									
B. Golsh																									
AS 6-35.4 METALLURGICAL LITERATURE CLASSIFICATION																									
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GOLDSHTEYN, Boris I.

the synthetic action of papain. B. I. Goldshtein and V. S. Tsiprovich. *Biochem. J.* 1958, 16, 1078. In Russian, 1958, 90, in English. 1962. Papain, a catalytic papain causes both hydrolysis and synthesis of peptide bonds simultaneously at pH = 4.7. The pp₁ formed probably belongs to the group of proteins. These, in contrast to peptones and proteoses, are made in H₂O, contain much less free NH₂ and N, show higher extinction rate of the biuret reaction, indicating greater number of peptide bonds, and are hydrolyzed by papain, HCl, and inhibit the effect of the enzyme. Inhibitors, mol. 0.01 inhibit the effect of the enzyme. Inhibitors, mol. 0.01 retard it. 1 cc. of a 0.1% papain soln. was added to a 20% peptone soln. at 37°. The hydrolytic activity was detected after adding cysteine-HCl, 1.5 mg. 1 cc. of re-acting mixt., and, keeping for 20. 4 hrs., according to Will-Skye for increase in free NH₂, and according to Will-Skye and Waldschmidt-Leitz for COOH groups, the N-ester and Waldschmidt-Leitz for COOH groups, the N-ester by CCl₃COOH is decreased, and this acid could not be used in the detn. of the synthetic activity. B. Golsh.

ASB 51.4 METACOLOGICAL LITERATURE CLASSIFICATION

GOLDSSTEIN, Boris I

Fermentative mechanism of infection of wheat by *Eurygaster intergriceps* Put. and its control in bread baking. B. I. Goldshteyn, V. Yu. Gorbachevskaya and O. S. Sklovskaya. *Biochem. J. (Ukraine)* 16, No. 2, 193 (1963) in Russian (in English, 205) (1963). The damage is done by the insect (I) to the wheat gluten (II), which becomes stringy and loses its elasticity. The indications of merca of proteolytic enzyme (III) activity lead to the conclusion that that enzyme is introduced by I with the bite. Expts. with normal and infected grain and with II and gelatin showed that in the reduction of total N and the increase in sol. N, N pptd. by 2.5% CCl_3COOH (IV), free and peptide tyrosine (not pptd. by IV), amylolytic and proteolytic activity of H₂O exts. of the grain and considerable increase of tyrosinase, the behavior of III resembles that of rennin. The actions of trypsin, pepsin and papain on these proteins were different in nature. The process of degradation of II appears similar to the coagulation of milk by the same enzymes. Addn. of 2.5% of NaCl, on the wt. of the flour, or 0.5% of anhyd. Na_2SO_4 sharply reduces the effect of I. Application of Na_2SO_4 to bread-making from infected wheat gave excellent results. B. Gutel

AS 15.4 METALLURGICAL LITERATURE CLASSIFICATION

GOLDSTEIN, Boris I.

BALINSKIY, B. I.; GOLDSTEIN, B. I.; (2 and B. I. Lishman and S. L. Schapiro ?)

"Concerning the Induction Problem of a Neural Plate Through Extractive and Synthetic Preparations"

Inst. of Zool. and Biochemistry; Acad. Sci. Ukrainian SSR

Doklady AN, 27, No. 5, 1940

GOLDSHTEYN, Boris I

Determination of dehydroascorbic acid and iron-ascorbic acid in tissues. B. I. Goldshteyn and D. V. Volkenzon. *Biochem. J. (Ukraine)* 17, 219-23 (1911); cf. C. A. 36, 48287. Dehydroascorbic acid in tissues is reduced by treatment with sulfosalicylic acid-Zn and detd. by titration with 2,6-dichlorophenol-indophenol. If much "masked" Fe is present, HPO_4 is added after treatment with Zn in order to remove color and stabilize the ascorbic acid. The procedure is inapplicable to detn. of isolated dehydroascorbic acid since irreversible decomposition occurs. The two fractions of the new form of ascorbic acid (1-ascorbic acid) are detd. similarly, the first after grinding the tissues with 3% HPO_4 + 20% sulfosalicylic acid. In the detn. of the second fraction, 20% HPO_4 is used instead of 3%. B. C. P. A.

ASA-SCA METALLURGICAL LITERATURE CLASSIFICATION

GOL'DSHTEIN, Boris I

Inst. Microbiology, (-1944)

Inst. Zoology, (-1944)

"A Method for Staining of the Cytoplasmic Structures of Cells,"

Zhur. Mikrobiol., Biotekhnol., i Immunol., 1944, 10-11, 1944.

GOLDSHTEYN, Boris I

CA

11A

Changes of sulfur-containing amino acids within the protein molecule, and the influence of thyroid hormone. B. I. Goldshteyn, M. B. Gintsburg, E. A. Koll, E. Yu. Mil'gram, and O. S. Sklovskaya (Inst. Exptl. Endocrinol., Moscow). *Biokhimiya* 11, 447-50 (1946). The changes in the SH groups and S-containing amino acids in the muscle protein myosin were studied. During the prolonged extn. of myosin, some ATP always disappeared from the ext. The addition of ATP lowered the SH content of myosin. It is postulated that during the enzymic hydrolysis of ATP there takes place a perpetual transfer (oscillation) of the S atom from one peptide chain to the other, thus producing the first phase of muscular contraction. The amt. of free SH groups in myosin and hepatosin increased during exptl. hyperthyroidism. This suggests that the thyroid hormone ruptures the thio ether linkages in proteins. The SH groups that are thereby formed are then oxidized. H. Priestley

GOLDSHTEYN, B. I. "Changes of Sulfur-containing Aminoacids within the Protein Molecule, and the Influence of thyroid Hormones" Dept. of Biochem. Inst. of Experimental Endocrinology, Moscow, *Biokhim.*, 11, NO. 5, 1946

GOLDSHTEYN, Boris I

iron ascorbic acid in animal tissues. B. I. Goldshtein and D. A. Vol'kenzon (Inst. Exptl. Endocrinology, Moscow). *Biochimica* 12, 89-96(1947); cf. C.A.B. 30, 15411. -It had previously been detd. that there exists in animal tissues not only free, reduced ascorbic acid, but also ascorbic acid combined with proteins with the aid of mineral, or so-called easily dissolved Fe. The part of the protein to which Fe-ascorbic acid (I) is attached is the nucleic acid. Only minute amts. of I are found in the cytoplasmic nucleic acid from malignant tumors. The thyroid hormone is capable of transforming the free ascorbic acid of tissues into I. H. Priestley

DEPT. OF BIOCHEMICAL, ALL-UNION INSTITUTE OF EXPERIMENTAL ENDOCRINOLOGY,
MOSCOW

ASB, S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

GOLDSHTEYN, Boris I

ca

11

Effect of autoxidizable iron complexes on the pregnancy of rats. B. I. Goldshtein, F. Z. Taraschanskaya, and D. V. Vol'kenzon (Inst. Exptl. Endocrinology, Kiev). *Bull. Exptl. Biol. Med.* 23, 200-2(1947).—Autoxidizable Fe-tartrate acid complex (20-30 mg.) injected up to 10 days after conception sharply terminates pregnancy in rats, with resorption of the embryo. The complex acts by reducing the ascorbic acid content of the corpora lutea and can be counteracted by simultaneous introduction of 0.025 mg. progesterone daily. Cf. C.A. 42, 4855d.

Harold Outfield

ASH 11.6 METALLURGICAL LITERATURE CLASSIFICATION

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0011. Amst, B.I.

22056 Gel'lshteyn, M.I., Kohn, M.V., i Shkharlikovskiy, M.F. Gyst prikereniya
penitsiil'noy i bochenii Turekbuloy. Kuzni i Pestey, A. I. Shkharlikovskiy v Seriyey
Infektatsiy. -- Yuzh. 5-ye avt.: M. I. Shkharlikovskiy i A. I. Kohn. Infektatsiya
Infektatsiya v Turekbuloy, 1971, 1-ye, 1-1-12

LC: 1-1-12, 1-1-12, 1-1-12, 1-1-12, 1-1-12, 1-1-12

GOL'DSHTEYN, Boris I.

"Review of St. George's Book, 'The Activity of the Muscles' " - B. I. GOL'DSHTEYN.

Biokhim., 13, No. 4, 1948

GOLDSHTEYN, Boris I

The mechanism of the action of vitamin C. B. I. Goldshteyn, D. A. Vol'kenzon, L. G. Kondrat'eva, and N. P. Ulyanova. *Int. Exptl. Endocrinology, Moscow, Biokhimiya* 15, 174 (1960), *U.S.S.R.* 41, 5105d. The chief function of ascorbic acid is to participate in the formation of desoxyribonucleic acid in the nuclei. It regulates the phys.-chem. properties of the nuclei (as the viscosity) and other important functions (as fission). These conclusions are based on the following exptl. results: Nuclei were sepd. from the liver of guinea pigs by the method of Doumle (*U.S.S.R.* 37, 31109) at a pH of 4. The nuclei were dissolved in a 0.5% soln. of Na-ClO₄ (0.7 g./200 ml.). The relative viscosity was detd. at 15°

in an Ostwald viscometer. The soln. of the nuclei was hydrolyzed by heating for 2 hrs. at 30-35°. In the hydrolyzate ribose, desoxyribose, and P were detd. One group of guinea pigs received the ordinary lab. ration. Another group received the same ration which had previously been autoclaved. Finally, a third group was completely starved and received only water and ascorbic acid. The most characteristic feature about C-avitaminosis was the sharp drop in the viscosity of the nuclei dissolved in Na-ClO₄, which amounted to about 10% of normal. Ribose increased and desoxyribose decreased in the soln. of the nuclei of the avitaminous animals. Ribonucleic, instead of desoxyribonucleic acid, had been formed. This also accounted for the change in viscosity. The mol. wt. of desoxyribonucleic acid is about 50 times as great as that of ribonucleic acid. No such changes were observed in the starved animals. In exptl. hyperthyroidism, the decrease in ascorbic acid was accompanied by a decrease in the viscosity of the liver nuclei of guinea pigs. On feeding the exptl. animals ascorbic acid and thyroxine, the decrease in viscosity disappeared. H. Priestley

CA GOLDSHTEN, Boris I

Determination of iron-ascorbic acid in tissues of the animal organism. B. I. Goldshten, D. A. Vol'kenzon, and S. A. Kachurova. *Endocrinological Int.*, Moscow, *10 Aktsiya*, 15, 411-186 (1956); *U.S.S.R.*, 41, 54954.

Further evidence is given to support the view that animal tissues contain Fe-ascorbic acid bound with nucleic acids. Although Fe can be titrated under certain conditions by 2,6-dichlorophenolindophenol, the result is much greater than the Fe found in tissues. When the ascorbic acid is titrated in the presence of 40% H₂PO₄, instead of H₂PO₄, the Fe is not titrated by the indicator. Fe-ascorbic acid is detected by titrating on a constant 1 g. tissue with 1 ml. distilled water, and 0.1 ml. 20% sulfosalicylic acid in 1 ml. 10% H₂PO₄. The material is quantitatively transferred to a wide test tube, the mortar is washed with 1 ml. 10% sulfosalicylic acid, and 0.02 g. Zn dust is added. The tube is warmed for 30 min. at 52°C. The contents are filtered, washed twice with 1 ml. sulfosalicylic acid, and titrated with 2,6-dichlorophenolindophenol. The same procedure, but without the Zn dust, is used for detg. free ascorbic acid in the tissue. The difference represents the Fe-ascorbic acid. An increase of both free and Fe-ascorbic acids was found in the tissues of guinea pigs that had been fed daily 25 mg. cryst. ascorbic acid for 35-45 days. It has been shown polarographically that ascorbic acid is liberated when nucleic acid is treated with Zn dust in the presence of H₂PO₄. The presence of ascorbic acid in the nucleic acid from rabbit liver was confirmed by the isolation of the 2,4-dinitrophenylhydrazide. H. Prostky.

GOL'DSHTEYN, Boris I.

"Chemical Structure of Myosin and the
Nature of Muscular Contraction," Ukr.
Biokhim. zhur., 22, No.3, 1950

GOL'DSHTEYN, B.I.; KONDRAT'YEVA, L.G.; GERASIMOVA, V.V.

Effect of vitamin C on conversion of nucleic acids in cell in the animal organism. Biokhimiia, Moskva 17 no.3:354-361 May-June 1952.

(CML 25:1)

1. Biochemical Laboratory of the Scientific-Research Institute of Nutrition of the Ministry of Public Health Ukrainian SSR, Kiev.

GOL'DSHTEYN, Boris I.
B.I.

Mechanism of the action of thyroid gland hormone. Ussr.blokhim.zhur. 24 no.2:
160-171 '52. (MLBA 6:11)

1. Otdel biokhimii Vsesoyuznogo instituta eksperimental'noy endokrinologii,
Moskva. (Hormones) (Thyroid gland)

GOLDSHTEYN, Boris I

Effect of vitamin C on transformations of nucleic acids in cells of the animal organisms. B. I. Goldshtein, L. G. Kondrat'eva, and V. V. Gerasimov. Ministry Health, Kirovskaya, U.S.S.R. *Arch. Sci. Res.* 83: 456-461, 1972. Key words: 45, 46, 47. Ribonucleic acid (RNA) of the cytoplasm of cells of the cytoplasm and II of the nucleus, as shown change of deoxyribonucleic acid (DNA) of the nucleus, and in specimens of malignant tumors, intestinal tumors, and in specimens of avitaminotic guinea pig. The possible participation of ascorbic acid in formation of II is indicated and may be the main function of the vitamin C. It is found out of cell growth and development. The results of the experiments showed clearly especially with tumor tissues that in C-avitaminosis, the decrease of II and a rise of I occur. The reverse phenomenon, formation of I from II in the presence of vitamin C, could not be shown in normal tissues but did occur readily in tumor specimens of rat sarcoma. (C. M. Kosolapoff)

GOLDSHTEYN. B.I.

✓ Vitamin C, its forms and the mechanism of its action in the tissues of the animal organism. B. I. Goldshtein (Sci. Research Inst. Nutrition, Ministry of Health, Ukr. S.S.R., Kiev). *Vitaminy, Akad. Nauk Ukr. S.S.R.* 1953, 197-207. — Data are presented which indicate that the animal cells contain not only free ascorbic acid (I), but also Fe-I bound on nucleic acids with the Fe between the phosphate and I, that ribonucleic acid of the cytoplasm is transformed into deoxyribonucleic acid (II) of the cell nuclei of the animal tissue, and that I participates in the biosynthesis of II. E. Wierbicki

GOL'DSHTEYN, B.I.

A. The effect of vitamin C upon the conversion of nucleic acids in animal tissues. B. I. Gol'dshtein, V. V. Gerasimova, and L. G. Kondratyeva (Inst. Nutrition Ministry of Health, USSR, Kiev). *Biochimiy* 19: 431-43 (1974); cf. *C.A.* 47, 713c.—The *in vitro* expt. set up was the same as previously described with guinea pigs at the expt. animals. The max. activity of vitamin C (I) and ribonucleic acid (II) as reaction activators in the formation of deoxyribonucleic acid (III) in the cells of animal organisms is attained at a concn. of I of 5 mg./g. of tissue and of II of 10 mg./g. of tissue. The pH optimum for the reaction is between 6.5 and 8.0. Following the destruction of the cell structure the reaction of formation of III and the influence of

land II could not be observed. The reaction of formation of III in the cell is activated by I and dehydroascorbic acid and is not activated by the nonconvertible products of I, specifically diketogluconic acid. In C-avitaminosis (early or late stages) the inclusion of P₂ into III of the nucleus of the small intestine and of the spleen of the guinea pig is sharply slowed down in comparison with that of normal or starvation conditions. The introduction of I fully restores the rate of P₂ inclusion into III of the nucleus. A sharp reduction in the inclusion into P₂ into III of the nucleus of the small intestine and of the liver of guinea pigs was observed under conditions of C-avitaminosis and the introduction of radioactive P₂ 2 hrs. prior to killing the animal. The introduction of I 2 hrs. prior to killing the animal counteracts the above effect of C-avitaminosis. This indicates that the action of I upon the rate of formation of III of the cell nucleus is direct and rapid. A check of the data obtained in this study, especially by the methods of Schmidt and Thannhauser (*C.A.* 46, 1331) and of Davidson, *et al.* (*C.A.* 46, 1331), indicated that the general rule concerning the effect of C-avitaminosis on the rate of removal of I and III by the tissues of the animal organism, studied with the aid of radioactive I, is independent of the difference in the methods used in the determination of the nucleic acids. B. I. Gol'dsh.

GOLDSHTEYN, B. I.

USSR

Biological properties of sulfhydryl groups of amino acids and proteins. B. I. Goldshtein. *Uspehi Sovetskoi Biologii* 26:0-03(1984). The reactivity of SH groups of proteins can be altered by a variety of physical factors. Thyroxine is one of the factors and muscular contraction modulates. Thyroxine raises the reactivity of SH groups of myosin and myosin proteins, and in this way regulates the principal role as a physiologic regulator of the SH activity of tissue proteins. Changes in the activity of SH groups of myosin during contraction suggest a role for the SH groups of proteins in muscular contraction. Thyroid hormone affects the activity of the myofibrillar enzymes via the mechanism of the activity of their SH groups. The changes within the protein mol. which affect the reactivity of its SH groups are still unknown. These may be changes in conformation or local break, weakening, or appearance of new bonds within the protein mol. Denaturation is not the only change that produces increases in the SH activity of proteins. 28 refs.

I. A. Siskind

GOL'DSHEYN, B.I., GERASIMOV, V.V., KONDRAT'YEVA, L.G.

"Vitamin C Influencing the Velocity of Regeneration of Nucleic Acids in Cells of Animal Organism"; in the book Experience in the Use of Radioactive Isotopes in Medicine R. Ye. KAVETSKIY and I.T. SHEVCHENKO, published by the COSMEDIZDAT Publishing House of the UKRAINIAN SSR, KIEV 1955, represents medical transactions of a conference held in KIEV from 18-20 January 1954.

So: 1100235

GOLDSHTEYN, B I

USSR/Human and Animal Morphology - Metabolism

R-3

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 70461

Author : Goldshtein, B.I.

Title : The Influence of Sulfhydryl Groups on Biological Properties of Tissue Proteins.

Orig Pub : Genetika USSR, 1955, 47 pages.

Abstract : No abstract

Card 1/1

- 24 -

GOL'DSHTEYN, B.I.

GOL'DSHTEYN, B.I.

Vitamin C and nucleic acids. Vitaminy no.2:123-133 '56. (MLA 10:8)

1. Biokhimicheskaya laboratoriya Nauchno-issledovatel'skogo instituta pitaniya Ministerstva zdravookhraneniya USSR, Kiev
(ASCORBIC ACID) (NUCLEIC ACIDS)

GUZ', B.I. [Huz', B.I.]; GOL'DSHTEYN, B.I.; IVANYUK-BELUGA, Ye.I. [Ivaniuk-Beluga, IE.I.]; SHVEDKOVA-ROSHE, T.S.

Compound therapy in cervical cancer. Ped., akush. i gin. 19 no.1:
36-42 '57. (MIRA 13:1)

1. Kiyevskiy rentgeno-radiologicheskiy i onkologicheskiy institut
(direktor - prof. I.T. Shevchenko) i Institut pitaniya Ministerstva
okhrany zdorov'ya USSR (direktor - A.G. Stovbun).
(UTERUS--CANCER) (IRON SODIUM TARTRATE)

GOL'DSHTEYN, B.I.; GOTOVTSEVA, Ye.P.

Effect of thyroid hormone on SH groups and on sulfur-containing amino acid oxidase of D-amino acids of the liver [with summary in English]. Biokhimiia 22 no.6:994-999 N-D '57. (MIRA 11:2)

1. Biokhimicheskaya laboratoriya Nauchno-issledovatel'skogo instituta pitaniya Ministerstva zdravookhraneniya USSR, Kiev.

(THYROXIN, effects,

on liver sulfhydryl cpds. & D-amino acid oxidase (Rus))

(LIVER, metabolism,

D-amino acid oxidase & sulfhydryl cpds., eff. of thyroxin (Rus))

(OXIDASES,

D-amino acid oxidase, in liver, eff. of thyroxin (Rus))

(SULFHYDRYL COMPOUNDS, metabolism,

liver, eff. of thyroxin (Rus))

USSE/Human and Animal Physiology (Normal and Pathological). T-2
Metabolism, Nitrogen Metabolism.

Abstr Jour : Ref Zhur - Biol., No 16, 1958, 74582

Author : Gol'dshteyn, B.I., Gerasimova, V.V., Kondrat'yeva, L.G.

Inst : AS USSR

Title : The Participation of Vitamin C in the Biosynthesis of
Nucleic Acids.

Orig Pub : V. sb.: Vitaminy, 3, Kiev, AN USSR, 1958, 129-141.

Abstract : No abstract.

Card 1/1

- 14 -

GOL'DSHTEYN, B.I.; GERASIMOVA, V.V.

Significance of ascorbic acid in the formation of desoxypentose
compounds due to the effect of animal tissue extracts. Biokhimiia
25 no.2:340-343 Mr-Apr '60. (MIRA 14:5)

1. Biokhimicheskaya laboratoriya Kiyevskogo nauchno-issledovatel'skogo
instituta epidemiologii i mikrobiologii.
(ASCORBIC ACID) (TISSUE EXTRACTS)
(RIBOSE)

GOLDSHTEYN, B. I., and GERASIMOVA, V. V.

"On the Carbohydrate Component of Desoxyribonucleic Acid and The Effect on it of Ascorbic Acid in the Tissues of the Animal Organism.

report submitted for the 5th Intl. Congress of Biochemistry, Moscow, 10-16 Aug 1961.

Biochemical Lab, Inst. of Gerontology and Exptl. Pathology, Acad Medical Sci USSR

... ..

"The Legislature has the honor to acknowledge the receipt of your Assembly bill on the subject of 'Liquor'."

[illegible]

CHEN, N.G.; GOL'DSHEYN, B.I.; IONINA, M.A.

Studying the anticorrosive and antiscale properties of phenol waters of the Yenakiyevo Coke and Coal Chemicals Plant. Koks i khim. no.10:46-49 '63. (MIRA 16:11)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz (for Chen).
2. Yenakiyevskiy koksokhimicheskiy zavod (for Gol'dsheyn, Ionina).

1. The first part of the document is a list of names and titles of the participants in the meeting.

The second part of the document is a summary of the discussion. It begins with a statement of the purpose of the meeting, which was to discuss the results of the work done during the previous year.

The third part of the document is a list of the main points discussed during the meeting. These points are: (1) the results of the work done during the previous year, (2) the results of the work done during the current year, and (3) the results of the work done during the next year.

GULYY, M.F., akademik, otv. red.; BELITSER, V.A., red.;
GERSHENZON, S.M., red.; GOL'DSHTEYN, B.I., red.;
VIZIR, P.Ye., red.; TROITSKIY, G.V., red.; MARTYNIUK,
F.F., red.; YANKEVSKAYA, Z.B., red.

[Proteins in medicine and the national economy; blood
proteins, glucose oxidase] selki v meditsine i narod-
nom khoziaistve; selki krovi, glukozoksidaza. Kiev,
Naukova dumka, 1965. 247 p. (MIA 18:5)

1. Simpozium po voprosam proizvodstva i primeneniya
glyukozooksidazy. Kiev, 1964. 2. Krymskiy meditsinskiy
institut, Simferopol' (for Troitskiy). 3. Institut
biokhimii AN Ukr.SSR, Kiev (for Gulyy).

GRAND, AL. 1971

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